

16th Annual

EPA Region 6 Stormwater Conference

July 27 - August 1, 2014

AGENDA



The Worthington Renaissance Fort Worth Hotel
200 Main Street
Fort Worth, Texas 76102



The U.S. Environmental Protection Agency (EPA), in partnership with the South Central Chapter of the International Erosion Control Association (SCIECA), the City of Fort Worth, the Dallas Fort Worth Airport, the North Central Texas Council of Governments, and the States of Region 6 is hosting this 16th Annual EPA Region 6 Stormwater Conference from July 27 to August 1, 2014, at the Renaissance Worthington Hotel, 200 Main St, Fort Worth, Texas. This conference will address and discuss the various issues and challenges of managing municipal stormwater, as well as new and upcoming rules and regulations.

This conference is recommended for storm water professionals including permittees, owners, operators, contractors, consultants, engineers, and regulators of the stormwater systems.

Topics include:







- Sustainable Development, Low Impact Development and Green Infrastructure
- TMDL's and Watershed Implementation Plans
- Stormwater Funding
- Monitoring, New Technologies, and Case Studies
- Construction and Industrial Stormwater Management
- Legal, Ordinances and Regulations
- Stormwater Management Program and Training
- Public Education and Outreach




Sunday, July 27, 2014

7:00am - 4:00pm	REGISTRATION - <u>Post Oak Foyer</u>				
8:00am - 10:00am	<u>Elm Fork 1</u> CPESC Review Course Jimmy Eanes, IECA	<u>Elm Fork 2</u> CMS4S Review Course Heather Buck, Christopher Burke Engineering	<u>West Fork 1</u> CESSWI Review Course Julianne Morelli, Atkins Engineering	<u>West Fork 2</u> CISEC Course Brock Peters, Point Source Environmental	<u>Board Room</u> CPSWQ Review Course Lori Gates, Christopher Burke Engineering
10:00am - 10:20am	BREAK - <u>Trinity Elm Foyer</u>				
10:20am - 12:00pm	CPESC Review Course	CMS4S Review Course	CESSWI Review Course	CISEC Course	CPSWQ Review Course
12:00pm - 1:00pm	LUNCH - <u>Trinity Central</u>				
1:30pm - 3:00pm	CPESC Review Course	CMS4S Review Course	CESSWI Review Course	CISEC Course	CPSWQ Review Course
3:00pm - 3:35pm	BREAK - <u>Trinity Elm Foyer</u>				
3:35pm - 5:00pm	CPESC Review Course	CMS4S Review Course	CESSWI Review Course	CISEC Course	CPSWQ Review Course

Monday, July 28, 2014



7:00am - 6:00pm	REGISTRATION - <u>Post Oak Foyer</u>			
7:00am - 8:00am	CONTINENTAL BREAKFAST - <u>Grand Ballroom Foyer</u>			
8:00am - 10:00am	<u>Pecos 1</u> EPA Regulatory Construction Inspection Phil W. Handley, III, San Antonio Water System, Sarah Holcomb, New Mexico Environmental Department, and Everett Spencer -and John Blevins, US EPA	<u>Pecos 2</u> EPA Regulatory Industrial Inspection Raymond Melton, City of Oklahoma City	<u>Burr Oak</u> Envirocert Exam	<u>Post Oak</u> CISEC Course 
10:00am - 10:20am	BREAK - <u>Grand Ballroom Foyer</u>			
10:20am - 12:00pm	EPA Regulatory Construction Inspection 	EPA Regulatory Industrial Inspection		CISEC Course
12:00pm - 1:00pm	LUNCH - <u>Brazos Ballroom</u>			
1:30pm - 3:00pm	EPA Regulatory Construction Inspection	EPA Regulatory Industrial Inspection Mock Inspection Site Host: Martin Sprocket and Gear Company	EPA Region 6 Storm Water 101 US EPA/ State SW Managers	CISEC Exam 
3:00pm - 3:35pm	BREAK - <u>Grand Ballroom Foyer</u>			
3:35pm - 5:00pm	EPA Regulatory Construction Inspection 	EPA Regulatory Industrial Inspection	EPA Region 6 Storm Water 101 US EPA/ State SW Managers	CISEC Exam
8:30am - 9:45am	EXHIBITS OPEN	 This presentation will give an overview of the NPDES stormwater program according to the three types of regulated stormwater discharges - municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. It will also provide EPA stormwater strategy to help support communities in addressing their stormwater.		
9:45am - 10:00am		BREAK - <u>Rio Grande</u>		
10:00am - 11:00am		<u>Track 1 - Pecos 1</u> Sustainable Development/ LID/ GI Overview of the Institute for Sustainable Infrastructure's ENVISION Rating System Michael F. Bloom, R.G. Miller Engineers	<u>Track 2 - Pecos 2</u> Monitoring/ New Tech./ Case Studies Concurrent vs. Co-current Inclined Cell Sedimentation and How it Improves Surface Overflow Rates in a Hydro. Separator Hans de Bruijn, Fresh Creek Technologies, Inc.	<u>Track 3 - Burr Oak</u> SWMP/ Training New Directions for Integrated Stormwater Management (iSWM): Using an Outcome-Based Strategy to Encourage participation in North Texas. Jack Tidwell, North Central Texas Council of Governments (NCTCOG), Lesley Brooks, Freese and Nichols, Inc.
11:00am - 12:00pm	<u>The Incorporation of LID on Affordable Housing Projects</u> Steven D. Trinkaus, Trinkaus Engineering	<u>Predictive Perform. Scaling Method for Hydrodynamic Separators</u> Mark B. Miller, Aquashield, Inc.	<u>Impact of Fertilizer on Plant physiological Function for Better Erosion Control</u> Brad Flack, Storm-Tex Services	

Tuesday, July 29, 2014

12:00pm - 1:30pm	<div>LUNCH - <u>Brazos Ballroom</u></div> <div>Lessons Learned During Texas MS4 General Permit Development, Review, and Implementation</div> <div><div>Jaya Zyman-Ponebshek, TCEQ, Water Quality Division Assistant Director</div><div>Now that Texas has been administering the MS4 Program for Small MS4s for over 7 years, we have had the opportunity to gather useful information about what works and what does not work during the MS4 General Permit Development, SWMP review and actual program implementation elements. Ms. Zyman will discuss the importance of involving the stakeholders early in the process during permit development to get consensus and buy into the program, along with the challenges small MS4s have had during the learning and implementation of their programs. A “one size fits all” approach in implantation of the program is rarely successful, as cities have different needs and resources. The intent of this presentation is to share these lessons with consultants, MS4s, and other regulators in an attempt to continue to optimize the allocation of resources to this program and obtain the greatest environmental benefit.</div><div></div></div>				
	EXHIBITS OPEN - <u>Rio Grande</u>	<u>Track 1 - Pecos 1 Sustainable Development/ LID/ GI</u>	<u>Track 2 - Pecos 2 Monitoring/ New Tech./ Case Studies</u>	<u>Track 3 - Burr Oak SWMP/ Training</u>	<u>Track 4 - Post Oak Region 6 LID Panel</u>
1:45pm - 2:45pm		Controlling Pesticide Runoff from Nurseries Using LID and On-site Mgmt. Techniques Jason R. Vogel, Oklahoma State University	Texas Stream Team: Citizen Science Water Quality Monitoring and TMDLs Travis Tidwell, Texas State University	TPDES Construction General Permit Compliance Training Misti Shafer, Compliance Resources, Inc.	Region 6 LID Panel Moderator: Bob Adair, Convergent Water Technologies, Inc. Speakers: Zach Roach, Ideal Homes, Becky Roark, Illinois River Watershed Partnership, Dana Brown, Dana Brown Associates, George Radnovich, Sites Southwest
2:45pm - 3:45pm		Integrated Stormwater Design & Analysis of LID Connected to a Traditional Drainage System Michael Crenshaw, XP Solutions	Monitoring to Answer Questions, Not Just Collecting Data Roger Glick, City of Austin, Texas	What do Inspectors Need to Know about BMPs Terrill Lemke and Tim Zimmerly, Los Alamos National Laboratory	
3:45pm - 4:00pm		BREAK - <u>Rio Grande</u>			
4:00pm - 5:00pm		A Case Study: Southbury Medical Facility and LID Steven D. Trinkaus, Trinkaus Engineering	Integrated Catchment Modeling: Stepping Back for a Wider View and Better Understanding Nicholas J. Anderson, MWH Global, Inc.	The Value of Audit Preparation to Avoid Enforcement John Whitescarver and Diana McDonald	Region 6 LID Panel Moderator: Bob Adair, Convergent Water Technologies, Inc. Speakers: David Batts, Construction EcoServices
5:00pm - 7:00pm		EXHIBITOR RECEPTION - <u>Rio Grande</u>			



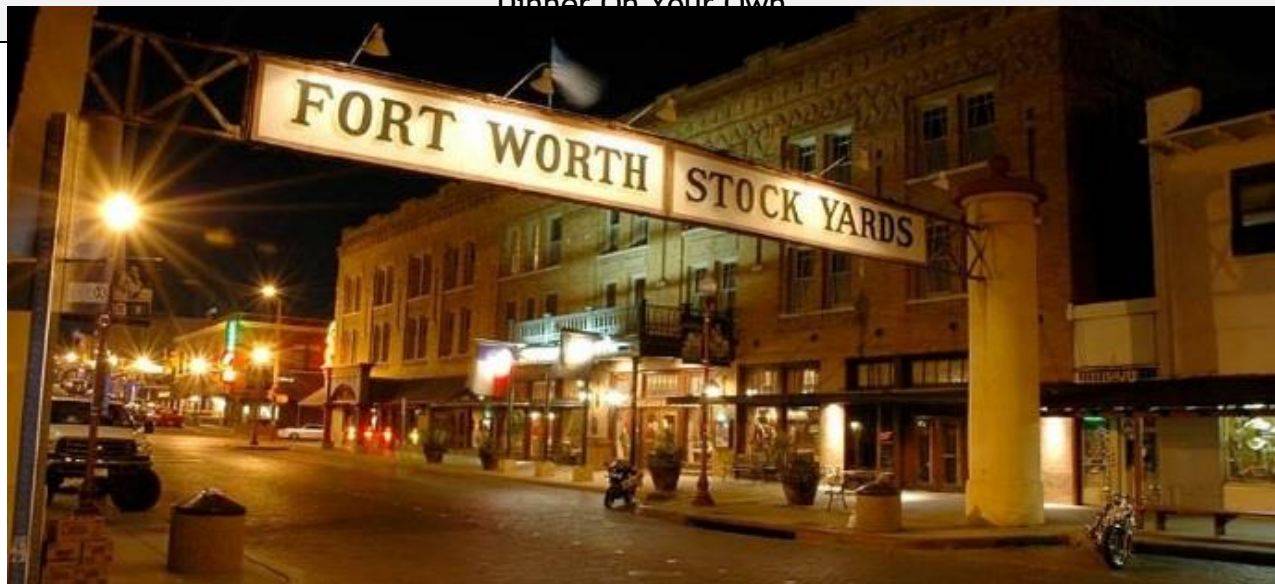
Wednesday, July 30, 2014

8:00am - 5:00pm	REGISTRATION - <u>Post Oak Foyer</u>				
7:00am - 8:00am	CONTINENTAL BREAKFAST - <u>Grand Ballroom Foyer</u>				
8:00am - 9:00am	Keynote Address - <u>Brazos Ballroom</u> The Trinity River Vision Project				
		Woody Frossard , Project Manager, Trinity River Vision Authority This presentation will give an overview of the Trinity River Vision project, discuss the regional water quality initiatives, and introduce the Low Impact Development (LID) alternatives being considered. The project overview will discuss the major project components including the Bypass Channel, three signature bridges, isolation gates, dam and channel lock, interior water feature, and Panther Island development			
9:00am - 10:00am	EXHIBITS OPEN - <u>Rio Grande</u>	<u>Track 1 - Pecos 1</u> Sustainable Development/ LID/ GI	<u>Track 2 - Pecos 2</u> Monitoring/ New Tech./ Case Studies	<u>Track 3 - Burr Oak</u> SWMP/ Training / Funding / Public Ed	<u>Track 4 - Post Oak</u> Special Technical Presentations
		Overview of the SITES Rating System for Sustainable Landscapes Lisa Storer, Lady Bird Johnson Wildflower Center at UT-Austin	Satiating a Yard-Hungry Channel: The Rehabilitation of the Bitter Creek Tributary Heather Harris, CH2M Hill and Janna Renfro, City of Austin, Texas	The Path to Post Construction Stormwater Implementation- City of Arlington, TX Ben Pylant and Stephen Crawford, Halff Associates, Inc.	BMP Performance Evaluation in Texas Michael Barrett, University of Texas at Austin
10:00am - 10:30am		BREAK - <u>Rio Grande</u>			
10:30am - 11:30am		The Green Country LID Design Competition Jason R. Vogel, Oklahoma State University	Tree Planting for Riparian Corridor Restoration and Stormwater Mgmt. Jonathan W. Holley and Catherine A. Elliott, Harris County Flood Control District	Picking the Right Stormwater Utility Fee Algorithm to Meet Your Community's Needs Stephen R. Lienhart, Dewberry	Municipal LID Regulations Steven D. Trinkaus, Trinkaus Engineering
11:45am - 1:00pm	LUNCH - Brazos Ballroom Water Quality - Partnering For Success (DFW's Approach Toward and Accomplishments In Improving Water Quality)				
		Jim M. Crites , Executive Vice President of Operations, DFW Airport As the world's third busiest airport, DFW Airport has developed a collaborative and holistic approach toward improving water quality and conserving consumption of water, in particular, potable water. DFW has a proven record of taking environmental stewardship beyond compliance and coordinating sustainability principles across all lines of airport business. Through communication, education,-public outreach, and implementation of an environmental management system, DFW Airport has achieved recognition as an EPA Performance Track and Clean Texas Platinum partner. Moving forward, DFW Airport is developing a comprehensive Sustainability Management Plan to further integrate sustainability of natural resources into its business processes and culture.			


Wednesday, July 30, 2014 (continued)

	EXHIBITS OPEN - <u>Rio Grande</u>	<u>Track 1 - Pecos 1</u> Sustainable Development/ LID/ GI	<u>Track 2 - Pecos 2</u> Monitoring/ New Tech./ Case Studies	<u>Track 3 - Burr Oak</u> SWMP/ Training / Funding / Public Ed	<u>Track 4 - Post Oak</u> Special Technical Presentations
1:15pm - 2:15pm		Monitoring as a Means to Keep Your Green Infrastructure on Track Rudraksha Jhaveri, Mahan Rykiel Associates	Case Study: Linking Watershed & Receiving WQ Models to Protect & Enhance WQ in the Trinity River-Ft. Worth, TX Tina Peterson, CDM Smith, et al.	Collaborative Partnerships for Public Education And Outreach Becki Begley, City of Fort Worth, Texas	EPA's Vision for TMDL Program Nelly Smith, US EPA Region 6 and State Stormwater Coordinators
2:15pm - 2:45pm		Break - <u>Rio Grande</u>			
2:45pm - 3:45pm		A Watershed Approach to Protecting Stream WQ Using Compost BMPs Britt Faucette, Filtrex International	Adjust your Lens to Bring your Regional Drainage Picture to Focus Katie Hogan, Freese & Nichols, Inc. and Kenneth L. Schaub, Jr., DPW-Fort Hood	Charting your Course and Tracking Success Kristina Twigg, Water Environment Federation	Concrete Channel vs. Natural Arroyo - Reg. SW. Mgmt. Strategies and Impacts on WQ in Greater Albuquerque Charles Thomas and Gerhard Schoener, SSCAFA
3:45pm - 4:45pm		Improved Stormwater Through Street Cleaning Steven Calvillo, TYMCO, Inc.	Modeling the Impacts of Regulations on Creek Health Roger Glick, City of Austin, Texas	Implementation & Mgmt. of an End of System Outfall Identification Project in a Phase I MS4 Betsi Chatham and Michael Kazda, City of Fort Worth	MS4 E-Assessment Thea Lomax and Everett Spencer, US EPA Region 6
6:00pm - 10:00pm	Shuttle To The Fort Worth Stockyards				

Dinner On Your Own



Departing for Field Trips Today at 8:00 am

7:00am - 6:00pm	REGISTRATION - <u>Post Oak Foyer</u>				
7:00am - 8:00am	CONTINENTAL BREAKFAST - <u>Grand Ballroom Foyer</u>				
8:00am - 8:15am	DEPARTURE FOR FIELD TRIPS - <u>Trinity Entrance</u>				
8:30am - 11:30am	<u>Field Trip A</u> Miller Coors Distributing	<u>Field Trip B</u> Eastern Hills Drainage Improvements	<u>Field Trip C</u> West 7 th Street Bridge and Urban Village Development		
12:00pm - 1:30pm	LUNCH - <u>Brazos Ballroom</u> Working with Regulators to Improve Storm water Design Guidance				
	<p>Dr. William F. (Bill) Hunt, Professor, North Carolina State University.</p> <p>All too often stormwater design manuals remain stale, suffering from decade-only updates and are based upon what other states or jurisdictions wrote a few years earlier. North Carolina takes a proactive approach to revising its stormwater design manual as it is an interactive process involving state regulators, university researchers, the design community and other impacted parties. Every year 1-3 chapters of the state's design manual are updated and the findings communicated to implementers. This presentation will highlight the process and illustrate how this was done for both permeable pavement and rainwater harvesting.</p>				
1:30pm - 3:30pm	<u>Post Oak</u> New Mexico State Breakout	<u>Brazos Ballroom</u> Texas State Breakout	<u>Pecos 1</u> Oklahoma State Breakout	<u>Pecos 2</u> Arkansas State Breakout	<u>Burr Oak</u> Louisiana State Breakout
3:30pm - 4:30pm	BREAK - <u>Grand Ballroom Foyer</u>				
4:30pm - 6:00pm	COCKTAIL RECEPTION AND EPA REGION 6 GI/LID POSTER COMPETITION <u>Grand Ballroom Foyer</u>				
6:00pm - 8:00pm	EPA AWARD CELEBRATION DINNER - <u>Brazos Ballroom</u>				

Thursday, July 31, 2014



- Field Trips -



Field Trip A

Miller/Coors Distributing - 7001 South Freeway, FW, TX 76134

Thursday, July, 31, 2014 from 8:00 a.m. to 12:00 Noon

<http://www.millercoors.com/Home.aspx>

This Field Trip location showcases a “Water as a Crop” pilot project implementing conservation practices to protect and restore watersheds on private lands along the Trinity River and overall company environmental stewardship initiatives.

NOTE:

The tour is limited to only **30** attendees and is currently full. There is a waiting list if some original signups drop out.

Field Trip B

Eastern Hills Drainage Improvements

5701 Shelton, FW, TX 76106

Thursday, July, 31, 2014 from 8:00 a.m. to 12:00 Noon

www.fortworthtexas.gov



The Eastern Hills drainage facility was constructed to address severe flooding and treat storm water discharges from the watershed. The facility consists of a multi-use detention pond that serves as an outdoor recreational field for the Eastern Hills School, a water quality by-pass with Austin Sand Filter, and trash rack at drainage outfall. This project was a joint effort between the Fort Worth Independent School District and City of Fort Worth Storm water Management Department.

Field Trip C

West 7th Street Bridge & Urban Village Development

1860-3000 W. 7th Street, FW, TX 76102

Thursday, July, 31, 2014 from 8:00 a.m. to 12:00 Noon

www.fortworthtexas.gov

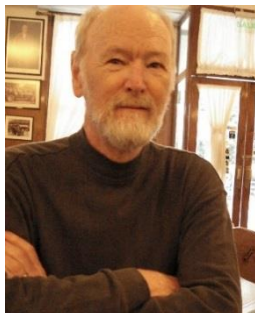
This vibrant, walkable, live/work environment is an important link between Downtown and the Cultural District. Mid- and high-rise housing, retail, and offices overlook the Trinity River corridor. Focus will include use of low-impact development, drainage improvements, resource efficiency and environmental stewardship.



Friday, August 01, 2014

8:00am - 11:00am	REGISTRATION - <u>Post Oak Foyer</u>
7:00am - 8:00am	CONTINENTAL BREAKFAST - <u>Grand Ballroom Foyer</u>
8:00am - 9:00am	<p>FEATURED TECHNICAL PRESENTATION - <u>Brazos Ballroom</u> Importance and Role of Maintenance for Stormwater Control Measures</p> <p>Dr. William (Bill) F. Hunt, North Carolina State University Stormwater Control Measures (SCMs) can have a great design, be well sited, and appropriately constructed. However, without proper maintenance these same SCMs are apt to underperform, and in the worst cases fail completely. This presentation will focus on what happens when SCMs suffer from neglect and provide a few basic tips for inspection and maintenance of several SCMs. North Carolina's Inspection and Maintenance Certification.</p>
9:00am - 9:15am	BREAK - <u>Grand Ballroom Foyer</u>
9:15am - 10:30am	<p>EPA SESSION - <u>Brazos Ballroom</u> Compliance and Enforcement Case Studies and Lessons Learned Jerry Saunders, US EPA Region 6, Water Enforcement Branch</p>
10:30am - 11:00am	GENERAL CONFERENCE PLANNING SESSION - <u>Brazos Ballroom</u>

Dr. Michael Barrett, Professor, University of Texas at Austin



Guest Technical Presenter

Presentation: Wednesday, July 30, 2014 (9:00 –10:00 a.m.)

“BMP Performance Evaluation in Texas”

This talk will briefly describe some of the monitoring efforts in the State of Texas that were conducted to assess the pollutant removal of a variety of stormwater Best Management Practices (BMPs). The presentation will also cover the primary mechanisms for pollutant removal in BMPs, how monitoring data is analyzed, and some of the common pitfalls encountered when evaluating BMP performance.

Dr. Barrett is a Professor of Civil Engineering at the University of Texas at Austin. His research interests are focused on the management of urban and highway Stormwater runoff. His projects primarily involve the evaluation of structural and nonstructural best management practices, and the preparation of guidance documents for land development activities. Dr. Barrett is a member of the ASCE Urban Water Resources Research Council and the Hydrology, Hydraulics, and Water Quality Committee of the Transportation Research Board.



Jim M. Crites, Executive Vice President of Operations Dallas/Fort Worth International Airport



Presentation: Wednesday, July 30, 2014 (LUNCH – 11:45am – 1:00pm)
“Water Quality – Partnering For Success,” (DFW’s Approach Toward and Accomplishments in Improving Water Quality)

James M. Crites serves as Executive Vice President for the Operations Division of Dallas/Fort Worth International Airport. He oversees the activities of Operations, Energy and Transportation Management, Asset Management, Airport Development and Engineering, Department of Public Safety, Planning and Environmental Affairs.

Mr. Crites joined the staff at Dallas/Fort Worth International Airport on October 30, 1995 to serve as the Director of Planning and Marketing Research. He has provided key leadership in planning for development of facilities, and new business opportunities throughout all aspects of the Airport.

Prior to this, Mr. Crites worked in several key management positions at American Airlines, Inc. including Managing Director, Airport Services and Managing Director, Financial Planning. Mr. Crites graduated from the University of Illinois after earning a Bachelor of Science Degree in Business Administration and subsequently earned a Master’s Degree in Operations Research while attending the Naval Postgraduate School, Monterey, California. He is currently serving as a member of: the Transportation Research Board Executive Committee; the University of Texas at Arlington College of Engineering Advisory Board; the U.S. Travel Association Board of Directors; the Airports Council International – North America Technical and Operations Committee; and the Subcommittee of the RTCA NexGen Advisory Committee.

Ron Curry, Administrator for EPA's Dallas, Texas (Region 6)



WELCOME AND OPENING PLENARY
Tuesday, July 29, 2014 (8:00 - 8:30 am)

Ron Curry was appointed as US EPA Region 6 Regional Administrator in September 2012. He has more than 36 years of management experience in local, state and federal government, as well as the private sector. Most recently, Curry worked with the University of New Mexico on the development of their Energy/Water/Environment Nexus Studies program. Prior to that, he spent eight years serving in former New Mexico Governor Bill Richardson’s administration as cabinet secretary of the Environment Department and Natural Resource Trustee. In the position as secretary, he oversaw the regulation of the Los Alamos and Sandia National Laboratories and the implementation of standards to protect the air, water and land of New Mexico. He also led the Governor’s initiative to join the Western Climate Initiative and lead the climate change implementation state team in New Mexico. He developed the Environmental Justice Executive Order signed in November 2005 by Governor Richardson. As trustee, he successfully negotiated a \$13 million ground water consent decree in 2010.

He has extensive experience working closely with the EPA, the U.S. Department of Energy and the U.S. DoD, as well as industry. He also served as administrator for the Village of Los Ranchos and as a city manager in Santa Fe. Earlier in his career, Curry was a senior public affairs specialist for Gram Inc. and worked on a site-wide environmental impact statement for Los Alamos National Laboratory; and VP of CEI Enterprises, a manufacturing firm. He has over 20 years of experience in private business including 10 years owning a small business franchise started with his father. His interest in the environment grew during his manufacturing career while marketing products into the South Coast Air Quality District in California. He brings to the EPA a keen understanding of federal environmental regulations impacts on business owners and entrepreneurs as well as state and local governments.

Brad Flack, CPESC, CESSWI, President at Storm-Tex Services Spring, Texas (Houston, Texas Area) Environmental Services



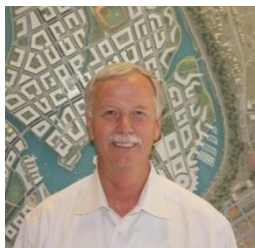
WELCOME AND OPENING PLENARY Tuesday, July 29, 2014 (8:00 - 8:30 am)

Brad has earned his designation, among select thousands in the world, as a **Certified Professional in Erosion & Sediment Controls** (CPESC) as well as his designation as a **Certified Erosion, Sediment and Storm Water Inspector** (CESSWI), lending his experience and training to his customers to consult them in all of their storm water needs. He has been invited to speak on storm water and erosion control issues in San Diego, CA; Nashville, TN; New Orleans, LA; Fort Worth, TX; Houston, TX and College Station, TX.

Additionally he has been elected as the **Administrative Vice President of the South Central Chapter of the International Erosion Control Association** and will serve as **President-Elect for 2015-2016** and the Region 7 Representative for the CPESC, Inc. group as well as the **Technical Vice-Chair for the Council**, and is Co-Chair on the Education Committee: Stormwater Management Track for the IECA Region 1 North America, South America & Europe as well as an IECA Mentor and also as a TCEQ EnviroMentor.

He has also served as a moderator on the detailed reference manual *Current Issues in Storm Water Management*, now available online. Use that link for a 20% discount.

Woody Frossard, Project Manager, Trinity River Vision Authority



Guest Technical Presenter

Presentation: Wednesday, July 30, 2014 (8:00—9:00 a.m.) **“Trinity River Vision Project”**

Mr. Frossard is the project manager for the District on the Trinity River Vision – Central City Project. He is the chief liaison between the Corps of Engineers and the local sponsors managing the NEPA planning process as well as overall project implementation and construction for the District.

This \$900 million project will provide improved flood control and economic development for Fort Worth and Tarrant County. Panther Island will be a pedestrian oriented waterfront neighborhood and is planned to include 10,000 mixed-income residences, 16,000 permanent jobs and is estimated to boost the Tarrant County economy by \$1.6 billion per year.

Because water quality and aesthetics are crucial to the project’s success, the project partners have enacted several water quality initiatives to properly plan for the project’s water quality needs. TRWD is currently underway with a regional water quality study to assess the impact of contributing watersheds on the Trinity River with linked watershed and receiving water quality models. The study is utilizing the hydrodynamic USACE CE-QUAL-W2 receiving water quality model developed for the Trinity River and urban lake system and linking with USEPA SWMM models of the contributing watersheds. This will allow effective prioritization of water quality infrastructure.

Lastly, this presentation will describe a sliding scale of LID implementation options for Panther Island and present a business case evaluation of LID versus traditional development practices. The storm drain master plan included consideration of several LID elements, including green streets, rain gardens, and green roofs. This study has cast a vision for LID development in the Panther Island area and laid the foundation for future LID efforts.

Trinity River Vision Project Manager, Trinity River Vision Authority-Environmental Services Director, Tarrant Regional Water District Responsible for all environmental functions of the District. The Water District is a political subdivision of the State of Texas. It is responsible for the supply of raw drinking water to a large portion of Tarrant County, Texas with the District's major customers being the Trinity River Authority of Texas and the cities of Fort Worth, Arlington and Mansfield. The environmental functions include water quality, waste control, watershed management, oil and gas pollution, and emergency response. The watershed management consists of environmental planning and permitting for the five major reservoirs and two minor reservoirs and their associated watersheds covering 3,500,000 acres. This includes the design and implementation of a Water Quality Management Program for each reservoir and its associated watershed. This program comprises field monitoring of water quality and computer modeling of water quality in the lakes and streams of the various watersheds to assess the need for pollution control. This position requires representation and liaison with the federal and state agencies responsible for implementation of all environmental laws and regulations. This is to insure that the District complies with and stays informed on all new laws and regulations affecting the supply or quality of water the District is responsible for to our service area.

Dr. William F. (Bill) Hunt, Professor, North Carolina State University



Guest Technical Presenter

Presentation: Thursday, July 31, 2014 (12:30-1:30 p.m.)

"Working with Regulators to Improve Stormwater Design Guidance"

Presentation: Friday, August 1, 2014 (8:00-9:00 a.m.)

"Importance & Role of maintenance for SCM's"

Dr. William F. Hunt ("Bill") is actively involved with Best Management Practices (BMP) research in the Biological and Agricultural Engineering Department and is the leader of the Stormwater Engineering Research Group. He is a Professor, Extension Specialist, & University Faculty Scholar. He is an active member of the American Society of Civil Engineers (ASCE) and the American Society of Agricultural and Biological Engineers (ASABE), where he has many committee leadership roles. Hunt conducts 20-25 workshops and other training events per year across NC and the USA. In 2010-11, he was an Honorary Research Fellow at the University of Auckland in New Zealand and in 2012, a CUGE Research Fellow for Singapore National Parks. He has two B.S. (Civil Engineering and Economics) and one M.S. (Biological and Agricultural Engineering) degrees from NC State. Bill received his Ph.D. from Penn State in 2003.

Deborah G. Nagle, Director, Water Permits Division



KEYNOTE ADDRESS

Presentation: Tuesday, July 29, 2014 (8:30 – 9:45 a.m.)

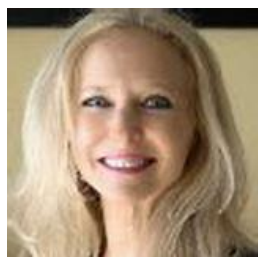
“History of EPA and Future Vision & EPA Storm water Updates”

Deborah G. Nagle has worked in a variety of Water Programs at the EPA since 1989 as an environmental engineer and later as a senior manager. She currently serves as the Director of the Water Permits Division. In this capacity, she is National Program Manager responsible for implementing the National Pollutant Discharge Elimination System (NPDES) permit program under the Clean Water Act. Some of the key NPDES program areas for which Ms. Nagle is responsible for developing national policy, regulations and training material include

municipal stormwater, utility discharges associated with combined sewers and separate sanitary sewers, vessel discharges associated with the normal operation of vessel, mining operations, and steam electric operations. Prior to working at the EPA, Ms. Nagle served seven years with the US Army Corps of Engineers. She is a 1982 graduate of the U.S. Military Academy at West Point with a degree in engineering.

Jaya Zyman-Ponebshek, PE, Assistant Director of the Water Quality Division at Texas Commission on Environmental Quality, Austin, Texas (Austin, Texas Area) Environmental Services

Presentation: Tuesday, July 29, 2014 (Lunch 12:00-1:30 p.m.)



Jaya joined the TCEQ in May 2009 after 23 years of working in the private sector as a consultant with multi-national environmental engineering firms. Her professional responsibilities at the time of her departure to the Agency included management of major projects in water quality, industrial and municipal wastewater treatment design and permitting, and National Environmental Policy Act (NEPA) permitting for major projects. In addition, she was the manager of the Water Quality and NEPA team within the regulatory compliance group.

In May 2009, she joined the Water Quality Division of the Texas Commission on Environmental Quality (TCEQ) as the team leader for the Storm Water and Pretreatment Team. In that capacity, she supervised technical projects related to the storm water and pretreatment programs and provided technical oversight of permits and projects, hiring and developing technical staff, workload allocation, and performance management.

In February of 2011, she was promoted to assistant division director of the Water Quality Division. In that capacity, she provides assistance to the Division Director, Section Managers, and Team Leaders by developing implementation plans, flow charts, and procedures for wastewater permitting processes. She also oversees Division projects and communicates regulatory and technical information concerning authorizations and other technical issues to agency staff, federal and state officials, the general public, and the regulated community. Jaya is also tasked with the interpretation of pertinent state and federal rules, regulations, standards and policies; and provides comments on rule proposals. Under this capacity, she also oversees and monitors the completion of required performance reports; recommends appropriate changes; assists the Director in overseeing the development of legislation for wastewater permitting and water quality assessments; and coordinates legislative functions throughout the division.

The University of Texas at Austin, Master's degree, Environmental/Environmental Health Engineering and Universidad Autónoma Metropolitana, Bachelor's degree, Biochemical Engineering.

Mayor Betsy Price, City of Fort Worth, Texas



WELCOME AND OPENING PLENARY Tuesday, July 29, 2014 (8:00 - 8:30 am)

Betsy Price, a Fort Worth native, was elected in 2011 as the 44th mayor of the City of Fort Worth. In 2013, was re-elected to a second two-year term. As the 16th largest city in the United States, Fort Worth remains one of the fastest growing large cities in the country.

A graduate from Arlington Heights High School and earned a bachelor's degree from the University of Texas at Arlington. Since then, she has been an active mother and a leader in the Fort Worth community, serving on numerous boards, commissions and professional associations. She ran her own successful business for 17 years, Price turned to public service, and was elected in 2000 to serve as Tarrant County's Tax Assessor where she quickly made her department one of the most efficient in Texas, saving taxpayers millions of dollars.

During her first term, Price led a community effort to build a city that's more fit, happy and productive. The result was FitWorth, a citywide initiative focused on promoting active lifestyles and healthy habits in both kids and adults. With an initial \$250,000 grant from Oncor, FitWorth is working to stem the rising tide of obesity, especially in children. Thanks to FitWorth, employers, schools, hospitals, faith communities, non-profits and retailers are energized and actively promoting a more healthy and sustainable city.

Along with her focus on promoting jobs, strengthening education, fighting crime and improving mobility, Price has made significant strides along the path toward her vision of a healthy, engaged and fiscally responsible city.

A Healthy Community: Under her leadership, Fort Worth has become a foremost cycling community, adding miles of new bike lanes and trails. Promoting pedestrian-friendly urban villages has also remained a staple of Price's vision for rebuilding the city's urban core. Moreover, she continues to push her long-term goal of linking neighborhoods and job centers with a comprehensive and convenient commuter rail system.

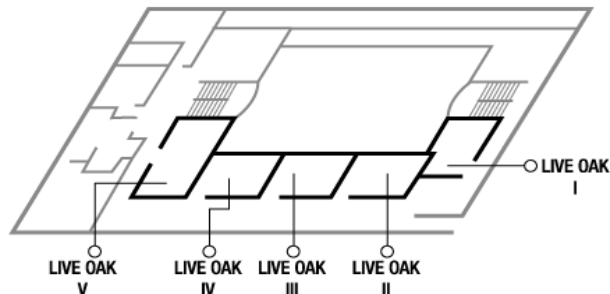
An Engaged Public: As Price likes to say, "It's Your Fort Worth." She understands a city is nothing without an active and engaged citizenry. Shortly after being elected as mayor, Price made quick work of starting a movement to get young people more involved in driving local public policy. The response to her call to young adults was overwhelming. Within a matter of months, citizens under the age of 40 from across the city came together, set a charge and dubbed themselves SteerFW. The organization has grown to more than 300-strong, with various task forces tackling some of the city's toughest challenges.

Thanks to today's hectic and busy society, getting citizens—both young and old—involved in charting the course for their city requires more creative approaches to the typical town hall meeting. With that in mind, Price found several ways to promote grassroots government. Most notably, her Walking and Rolling Town Halls have broken the mold of that tired town hall meeting with a casual—and healthy—way for citizens to connect with city leaders. In 2013, Price led the charge to launch YourFortWorth.org, the city's first 24/7 online public forum allowing citizens to share and vote on new ideas to improve their city.

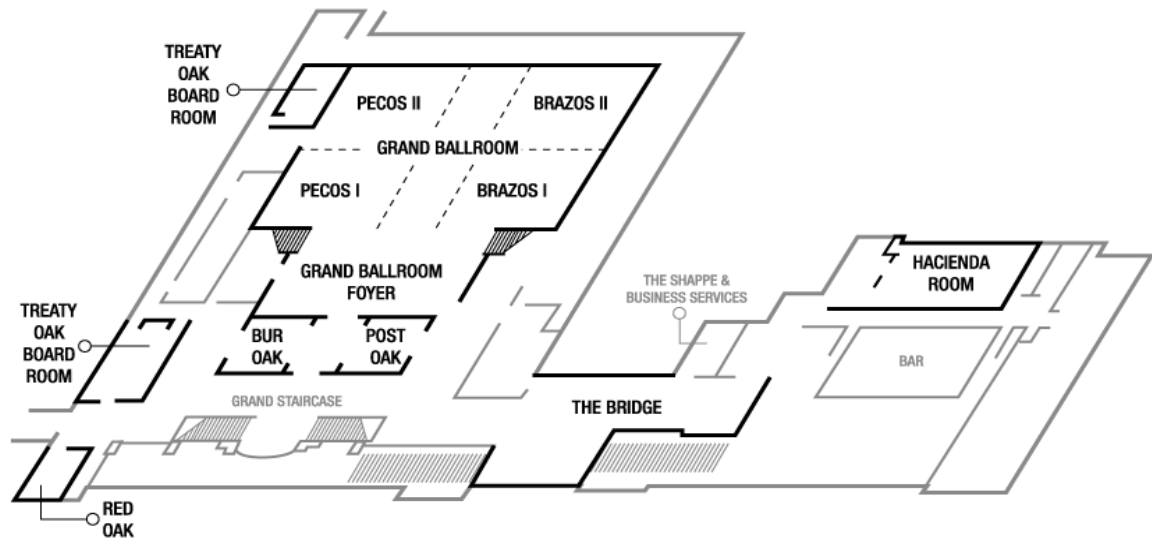
A Fiscally Responsible City: Price has been a consistent champion of using responsible and sustainable budget cuts to balance the city's \$1.2 billion budget. Additionally, Price and the City Council made bold changes to the city's pension plan in 2012 to protect taxpayers and stabilize the fund for current and future retirees. Price also believes in the power of doing public good with private investment. Putting to good use her decades of experience building personal and professional bridges, Price matched generous benefactors with community needs to help the city with everything from health and fitness, to public engagement, to public pools, to animal adoptions and more.

The Worthington Renaissance Fort Worth Hotel Map

LIVE OAK



MEZZANINE



TRINITY

